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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,530	04/15/2002	Wolfram Angerer	P/3013-13	4126

2352 7590 09/14/2004

OSTROLENK FABER GERB & SOFFEN  
1180 AVENUE OF THE AMERICAS  
NEW YORK, NY 100368403

EXAMINER
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VANAMAN, FRANK BENNETT

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/030,530

Applicant(s)

ANGERER ET AL.

Examiner

Frank Vanaman

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/1/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **Continued Examination**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 1, 2004 has been entered.
2. Claims 16-30 remain pending, no claims have been canceled, added, or amended.

### **Claim Rejections - 35 USC § 112**

3. Claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 16, as currently amended, recites a converter unit "operable to convert at least one of the speed of the rotor into torque, and the torque of the rotor into speed". The specification, drawing and original claims of the instant application do not support such a recitation to the degree required for an ordinary practitioner in the art to understand the invention. Applicant's specification refers to the converter unit in a number of locations (e.g., page 5, lines 25-26; page 6, lines 2-4; as well as pages 12 and 18). There is no support for a converter, to the extent that it has been described in applicant's specification, that performs the claimed function. Additionally, the specification lacks any teaching of a structural connection between the motor rotor and the converter which would allow such a "conversion", nor what specific task needed to drive motor such a converter, as recited, would address.
4. Claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16, as currently amended, recites a converter

Art Unit: 3618

unit "operable to convert at least one of the speed of the rotor into torque, and the torque of the rotor into speed". In view of the recitation at lines 5-6, describing the rotor as having an associated torque and speed, it is not clear how a converter can convert one of these into another, and further as the rotor is recited to possess both of these characteristics as it stands, the presence of such a converter is confusing.

### **Claims not rejected over the Prior Art**

5. Claims 16-30 are not rejected as being unpatentable over or anticipated by the Prior Art of record, however these claims are not in condition for allowance at this time in view of the rejections set forth above under 35 USC 112, first and second paragraphs.

### **Response to comments**

6. Applicant's comments have been very carefully considered, in combination with the reference provided in the Information Disclosure Statement. The converter described in the article submitted is directed to the conversion of electrical energy to control the operation of a motor, and is only electrically connected to the motor windings. It functions through the manipulation of current, voltage, drive frequency, the adjustment of duty cycle, and in this specific case, the advancement of phase angle. The operative connection, however, is solely electrical, and the device is not capable of performing the claimed conversion of motor torque to motor speed, or motor speed to motor torque, for similar reasons as those references already cited are incapable of such a conversion: there is no connection between the motor and converter which is capable of transmitting torque or speed as applicant has claimed, and as such, in view of these quantities not being delivered to the converter (and in view of the converter being an electrical device) there would be no expectation that it could perform the conversion which applicant claims. Furthermore, the converter discussed in the article is specifically directed to a variable reluctance drive, and there is no teaching that the system employed by applicant is of the variable reluctance type. Note that there is a specific structure associated with a variable reluctance machine, as described in the

Art Unit: 3618

article at the second column, page 1017. The article describes various operating modes of delivering current at a specific voltage to the motor windings, the modes being adjusted based on different operating speeds (see col. 1 of page 1020), however there is no teaching whatsoever in this article to support the notion of an electric motor driver as being capable of converting speed to torque or torque to speed as applicant has claimed. Applicant has not cited any particular portion of the article as supporting the concept which is claimed but deemed unsupported by the examiner.

### Conclusion

7. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.

As of May 1, 2003, any response to this action should be mailed to:  
Mail Stop \_\_\_\_\_

Application/Control Number: 10/030,530

Page 5

Art Unit: 3618

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to one of the following fax servers:

Regular Communications/Amendments: 703-872-9326

After Final Amendments: 703-872-9327

Customer Service Communications: 703-872-9325

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**

A handwritten signature in black ink, appearing to read 'F. Vanaman', with a date '9/10/07' written below it.